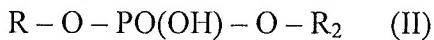


Amendments to the Claims

1. (Previously Presented) A phosphatidyl-L-serine sodium salt having a fatty acid composition identical to that of soybean lecithin and a degree of peroxidation of less than 5 produced by:

(a) reacting phosphatides of formula (II):



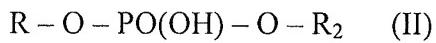
wherein R is diacylglycerol and R₂ is CH₂ – CH₂ – NH₂ or CH₂ – CH₂ – N(CH₃)₃, with serine in a single aqueous phase, in the presence of an effective amount of a purified fraction of phospholipase D with transphosphatidylation activity produced from a *Streptomyces hachijoense* strain to catalyze the reaction,

(b) purifying the product of (a) on an anionic and cationic exchange resin

(c) eluting the product of (b) at pH 6.2 from the cationic exchange resin, and

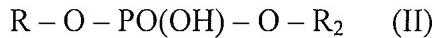
(d) slowly adding sodium acetate in water and ethanol to cause precipitation of the phosphatidyl-L-serine sodium salt having 95% degree of purity and a degree of peroxidation of less than 5, wherein said phosphatides of formula II are obtained from soybean, and wherein said reaction is conducted under nitrogen, and wherein said phosphatidyl-L-serine sodium salt is over 95% pure.

2. (Previously Presented) A phosphatidyl-L-serine sodium salt having a fatty acid composition identical to that of egg lecithin and a degree of peroxidation of less than 5 produced by reacting phosphatides of formula (II):



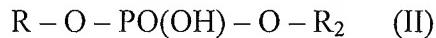
wherein R is diacylglycerol and R₂ is CH₂ – CH₂ – NH₂ or CH₂ – CH₂ – N(CH₃)₃, with serine in the presence of an effective amount of phospholipase D with transphosphatidylation activity produced from a *Streptomyces hachijoense* strain to catalyze the reaction, and wherein said phosphatides of formula II are obtained from egg, and wherein said reaction is conducted under nitrogen, and wherein said phosphatidyl-L-serine sodium salt is over 95% pure.

3. (Previously Presented) A phosphatidyl-L-serine sodium salt having a fatty acid composition identical to that of soybean lecithin and a degree of peroxidation of less than 5 produced by reacting phosphatides of formula (II):



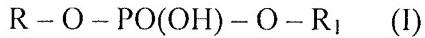
wherein R is diacylglycerol and R₂ is CH₂ – CH₂ – NH₂ or CH₂ – CH₂ – N(CH₃)₃, with serine in the presence of an effective amount of phospholipase D with transphosphatidylation activity produced from a Streptomyces hachijoense strain to catalyze the reaction, and wherein said phosphatides of formula II are obtained from soybean and wherein said phospholipase D is purified by eluting on an anionic cationic exchange resin at a pH of 6.2, and wherein said reaction is conducted under nitrogen, and wherein said phosphatidyl-L-serine sodium salt is over 95% pure.

4. (Previously Presented) A phosphatidyl-L-serine sodium salt having a fatty acid composition identical to that of egg lecithin and a degree of peroxidation of less than 5 produced by reacting phosphatides of formula (II):



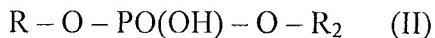
wherein R is diacylglycerol and R₂ is CH₂ – CH₂ – NH₂ or CH₂ – CH₂ – N(CH₃)₃ with serine in the presence of an effective amount of phospholipase D with transphosphatidylation activity produced from a Streptomyces hachijoense strain to catalyze the reaction and wherein said phosphatides of formula II are obtained from soybean and wherein said phospholipase D is purified by eluting on an anionic cationic exchange resin at a pH of 6.2, and wherein said reaction is conducted under nitrogen, and wherein said phosphatidyl-L-serine sodium salt is over 95% pure.

5. (Previously Presented) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a phosphatidyl-L-serine sodium salt of formula (I)



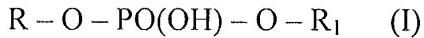
wherein R is diacylglycerol and R₁ is a hydrogen,

made by the process of reacting a phosphatide of formula (II):



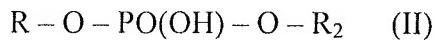
wherein R is diacylglycerol and R₂ is CH₂ – CH₂ – NH₂ or CH₂ – CH₂ – N(CH₃)₃, with serine in the presence of an effective amount of phospholipase D with transphosphatidylation activity produced from a Streptomyces hachijoense strain to catalyze the reaction to obtain said phosphatide according to formula (I), and wherein said reaction is conducted under nitrogen, and wherein said phosphatidyl-L-serine sodium salt is over 95% pure.

6. (Previously Presented) A cosmetic composition comprising a pharmaceutically acceptable carrier and a phosphatidyl-L-serine sodium salt of formula (I)



wherein R is diacylglycerol and R₁ is a hydrogen,

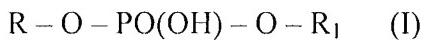
made by the process of reacting a phosphatide of formula (II):



wherein R is diacylglycerol and R₂ is CH₂ – CH₂ – NH₂ or CH₂ – CH₂ – N(CH₃)₃, with serine in the presence of an effective amount of phospholipase D with transphosphatidylation activity

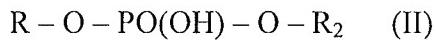
produced from a *Streptomyces hachijoense* strain to catalyze the reaction to obtain said phosphatide according to formula (I) , and wherein said reaction is conducted under nitrogen, and wherein said phosphatidyl-L-serine sodium salt is over 95% pure.

7. (Previously Presented) A food and dietary supplement comprising a carrier and a phosphatidyl-L-serine sodium salt of formula (I)



wherein R is diacylglycerol and R₁ is a hydrogen,

made by the process of reacting a phosphatide of formula (II):



wherein R is diacylglycerol and R₂ is CH₂ – CH₂ – NH₂ or CH₂ – CH₂ – N(CH₃)₃, with serine in the presence of an effective amount of phospholipase D with transphosphatidylation activity produced from a *Streptomyces hachijoense* strain to catalyze the reaction to obtain said phosphatide according to formula (I) , and wherein said reaction is conducted under nitrogen, and wherein said phosphatidyl-L-serine sodium salt is over 95% pure.

8. (Previously Presented) The food and dietary supplement according to claim 7, wherein the *Streptomyces hachijoense* strain is ATCC 19769.

9. (Previously Presented) A pharmaceutical composition capable of being administered orally comprising a pharmaceutically acceptable carrier and the phosphatidyl-L-serine sodium salt according to claim 1, 2, 3 or 4.

10. (Previously Presented) A cosmetic composition for topical application to the skin comprising a pharmaceutically acceptable carrier and the phosphatidyl-L-serine sodium salt according to claim 1, 2, 3 or 4.
11. (Previously Presented) A food and dietary supplement capable of being administered orally comprising a carrier and the phosphatidyl-L-serine sodium salt according to claim 1, 2, 3 or 4.
- 12-14. (Canceled)
15. (Previously Presented) The pharmaceutical composition according to claim 5 in the form of a capsule, tablet or granule.
16. (Previously Presented) The cosmetic composition according to claim 6 in the form of a cream or a gel.
17. (Original) A food and dietary supplement according to claim 7 in the form of a capsule, tablet or granule.
18. (Original) A food and dietary supplement according to claim 11 in the form of a capsule, tablet or granule.
19. (Original) The food and dietary supplement according to claim 8, wherein the phosphatide of formula (II) is selected from the group consisting of purified soybean lecithin and crude soybean lecithin.
20. (Canceled)

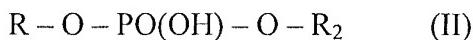
21. (Previously Presented) The phosphatidyl-L-serine according to claim 1 or 2, wherein the formula II phosphatide reactant is phosphatidylcholine, and wherein said phosphatidylcholine reactant is completely converted to a phosphatidyl-L-serine sodium salt.

22. (Canceled)

23. (New) A composition comprising a phospholipid having a titer of over 95% phosphatidyl-L-serine sodium salt having a degree of peroxidation of less than 5.

24. (New) A phosphatidyl-L-serine sodium salt having a fatty acid composition identical to that of soybean lecithin and a degree of peroxidation of less than 5 produced by

(a) reacting phosphatides of formula (II):



with sodium acetate trihydrate and calcium hydrochloride trihydrate, water, and serine at a pH of 5.6, under nitrogen at 45 °C;

- (b) adding lecithin and phospholipase D from *S. hachijoense*;
- (c) on completion of the reaction, adding a mixture of n-hexane/isopropanol/water, dissolving the mass and allowing the two phases to separate;
- (d) washing the upper phase with HCl and isopropanol at a low temperature;
- (e) counterextracting the acid phase with a mixture of hexane/isopropanol/water
- (f) concentrating the organic phases under a vacuum;
- (g) slowly adding sodium acetate in water and ethanol to cause precipitation of the phosphatidyl-L-serine sodium salt having 95% degree of purity and a degree of peroxidation of less than 5.

25. (New) The phosphatidyl-L-serine salt produced in the process described in claim 1 wherein the diacylglycerol of step (a) contains two fatty acids, which may be the same or different, saturated or unsaturated, having a length of between C₁₂ to C₁₄.
26. (New) The phosphatidyl-L-serine salt produced in the process described in claim 1 wherein the reaction temperature is 45° C +/- 5° C.
27. (New) The phosphatidyl-L-serine salt produced in the process described in claim 1 wherein the Streptomyces hachijoense strain is ATCC 19769.
28. (New) The phosphatidyl-L-serine salt produced in the process described in claim 1 wherein the phosphatide of formula (II) is crude or purified soybean lecithin.
29. (New) The phosphatidyl-L-serine salt produced in the process described in claim 1 wherein the phosphatide of formula (II) is egg lecithin.
30. (New) The phosphatidyl-L-serine salt produced in the process described in claim 1 wherein the process comprises a single reaction step and a single precipitation step.